Crista metopica consists of a massive, irregularly striated groove (Plate II, Figs. 1, 2). The proper area sensilligera does not project so much, the concentric striations observed by light microscopy are in fact longer or shorter concentric mounds. In their center is a circular opening through which runs the solenidion; the base of solenidion seems to lie deeper. Unlike under the light microscope, where the solenidia appear to be quite nude, they are—at least in the basal part—densely covered with quite short cilia (Plate II, Fig. 2). The sclerotized process visible on the permanent slides, which forms the continuation of the crista metopica posterior to area sensilligera, cannot be seen on SEM micrographs. That means that this structure is situated under the body surface of the mite. The shape of the tectum (epistome) is the same both in the drawing and SEM micrograph. The difference is only in the character of its joining to the anterior portion of crista metopica (Plate III, Fig. 3).

The ventral part of gnathosoma with palps is shown in Figs. 1—2 (Plate IV). The conical hypostome is covered with feathered setae and a terminal group of 4 pairs of nude setae. The detailed figure of the palp shows the lateral part of tibia (the side contiguous with gnathosoma with a large claw) and the character of the lateral ctenidia formed by stout blunt spurs and a more slender dorsolateral pointed spur. The spurs of ctenidia in the individual specimens examined differ in their bluntness. The longer and slender nude seta growing on the outer side of palptibia close to the insertion of the claw is well visible in Fig. 3 (Plate V). The same figure also shows the palpal tarsus with a spur next to the joining of the tarsus to tibia and with a terminal group of nude setae.

Very characteristic is the chaetotaxy of tarsus of the first pair of legs (Plate IV, Figs. 3—4). It is densely covered with barbed setae among which are regularly distributed numerous stout and nude setae (solenidia). At high magnification two sorts of striation of solenidia can be seen: a transverse striation similar to that of spurs in larval stages and a regular, longitudinal striation.

Genital aperture. When studying the permanent slides under the light microscope also the structures under the surface can be observed, while SEM micrographs show surface structures only. Therefore neither the genital suckers nor the penis and penile setae of male can be seen. The micrograph of genital aperture of male (Plate III, Fig. 4) clearly shows the genital setae, particularly the inner two pairs of arched and in the distal half strongly widened setae. However, the fine and dense ciliation of the widened part is blended and, unlike in other finer and well discernible structures, it is hardly visible. According to our hypothesis expressed in the foregoing paper (Daniel et al. 1973), the impressions of these setae can be found on the surface of the head of spermatophore (spermadrop). If this is so, the fine cilia in males which have already produced spermatophores may be glued together just by the substance forming the surface of spermatophore. In the clearing media this substance is dissolved, while in the natural material for SEM the cilia remain glued together. The outer two pairs of genital setae were, unfortunately, broken in our material for SEM.

In the figure showing the genital aperture of the female (Plate III, Figs. 1—2) there are 4 pairs of nude, pointed setae which are slightly widened in the form of bulb at the base, with irregular, longitudinal depressions visible at higher magnification.

2. NYMPH (Plates V—VI)

The morphology of nymphs (regardless of the metrical differences) is very similar to that of the adults, only the chaetotaxy is much simpler both in the number and character of setae. The body setae (Plate V, Fig. 1; Plate VI, Fig. 4) are shorter, located on small tubercles and sparse; otherwise they are identical with the setae of adults. The anterior part of body (dorsal part of propodosoma, gnathosoma and palps), as well

as the character of its setation can be seen in Fig. 2 (Plate V). Crista metopica also consists of a projecting sclerotized groove, although its striation is simpler than in the adults. Area sensilligera, insertion of sensillae and sensillae themselves are conformable to those of adults. They differ in lower number of paracristal setae (Plate VI, Fig. 3) so that the body surface with dense striation can be observed among them.

Hypostome (Plate V, Fig. 4) is covered with short branched setae. The setation is very scarce in comparison with the adults. The same concerns the coxae (Plate VI, Fig. 2—compare with Plate IV, Fig. 1). In the palps shown in Fig. 4 (Plate V) there is well discernible the tibial claw and the simplified armament of palptibia: ctenidium with 2 setae on the inner side and 1 slender nude seta at the base of tibial claw on the outer side of palptibia.

A considerable simplification can be observed also on the tarsus of the first pair of legs (Plate VI, Fig. 1—compare with Plate IV, Fig. 3), not only in the total number of setae but also in the ratio of the barbed setae and the nude blunt solenidia. Many of the feathered setae are barbed only on one side. The terminal and dorsal ones are smooth, slender and pointed.

СКАНИРУЮЩИЕ МИКРОСНИМКИ КРАСНОТЕЛКИ NEOTROMBICULA ZACHVATKINI (SCHLUGER, 1948): ИМАГО И НИМФЫ

В. Сикл, М. Даниел, В. Симонова и Г. Валтингер

Резюме. Дано морфологическое описание половозрелых особей и нимф краснотелки *Neotrombicula zachvatkini* (Schluger, 1948) на основании микроснимков, заснятых при помощи сканирующего электронного микроскопа, и сравнение с наблюдениями, сделанными под оптическим микроскопом.

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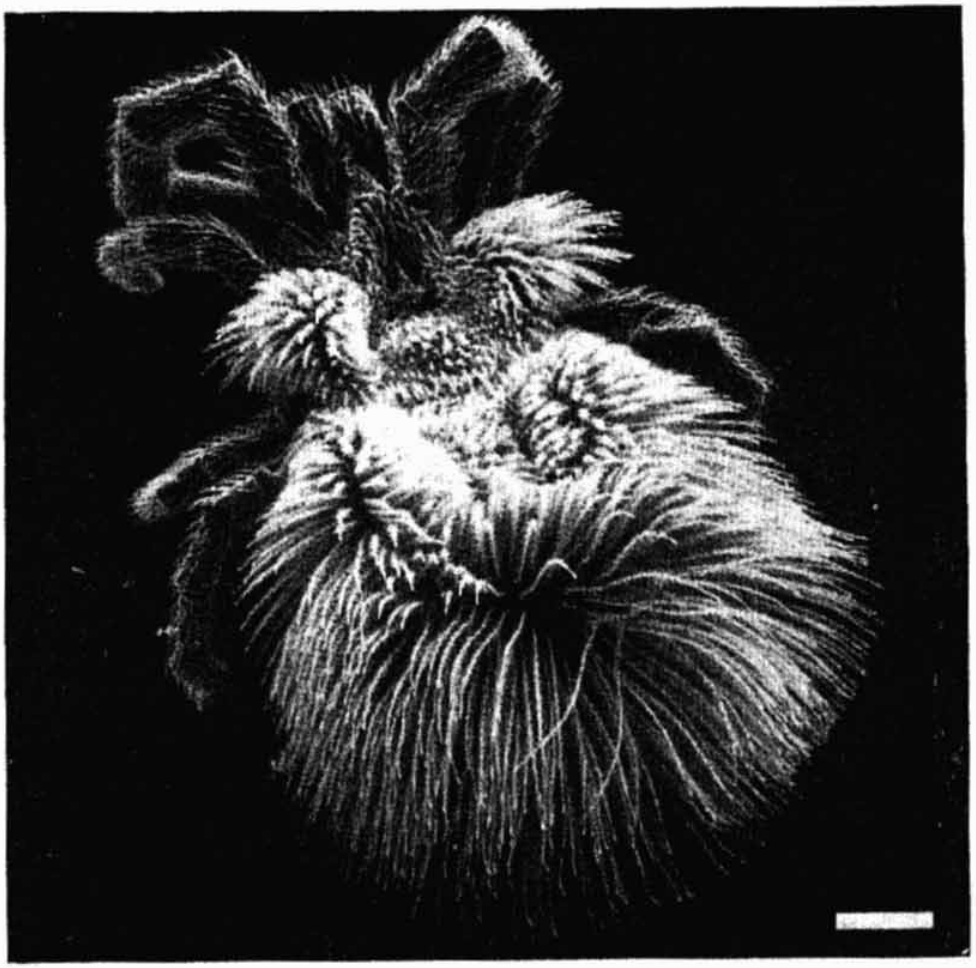

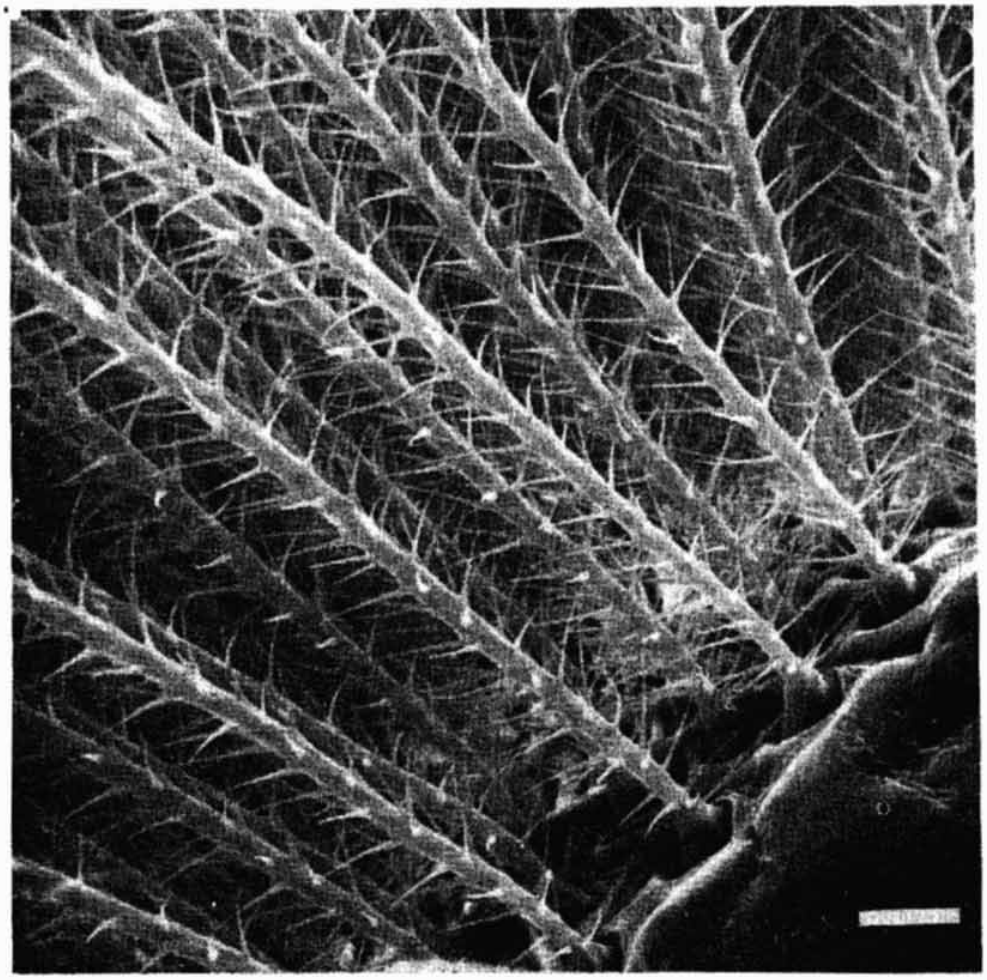

Fig. 1. *Neotrombicula zachvatkini*, adult, general character. (Scale = 143 μ.)
Fig. 2. *Neotrombicula zachvatkini*, adult, setae covering the posterior part of opisthosoma. (Scale = 16 μ.)

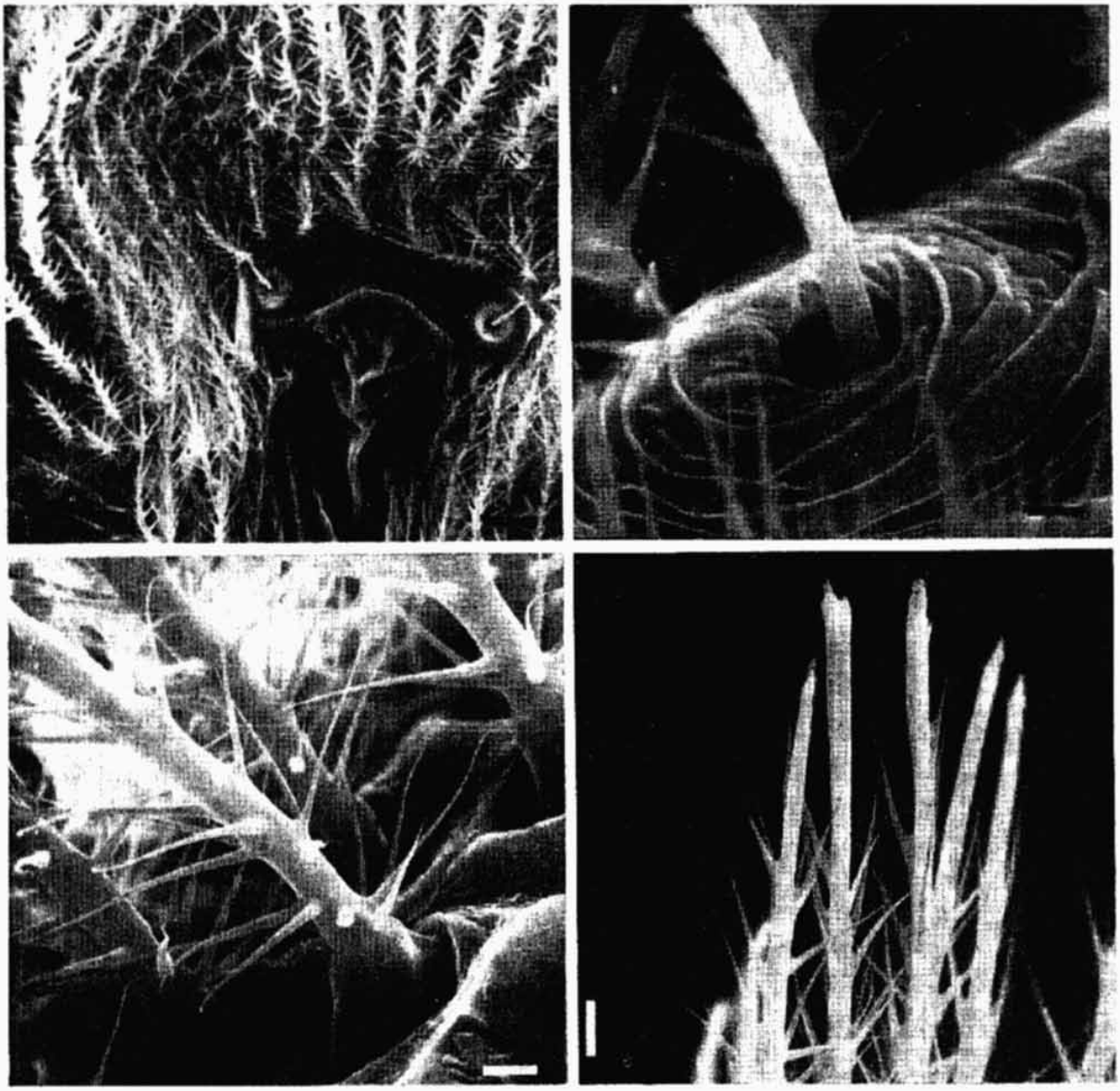

Fig. 1. *Neotrombicula zachvatkini*, adult, area sensilligera and posterior part of crista motopica. (Scale = 19 μ.)

Fig. 2. *Neotrombicula zachvatkini*, adult, insertion of sensillum. (Scale = 2 μ.)

Fig. 3. *Neotrombicula zachvatkini*, adult, of body setae growing on the tubercles. (Scale = 4 μ.)

Fig. 4. *Neotrombicula zachvatkni*, adult, character of ending of body setae. (Scale = 8 μ.)

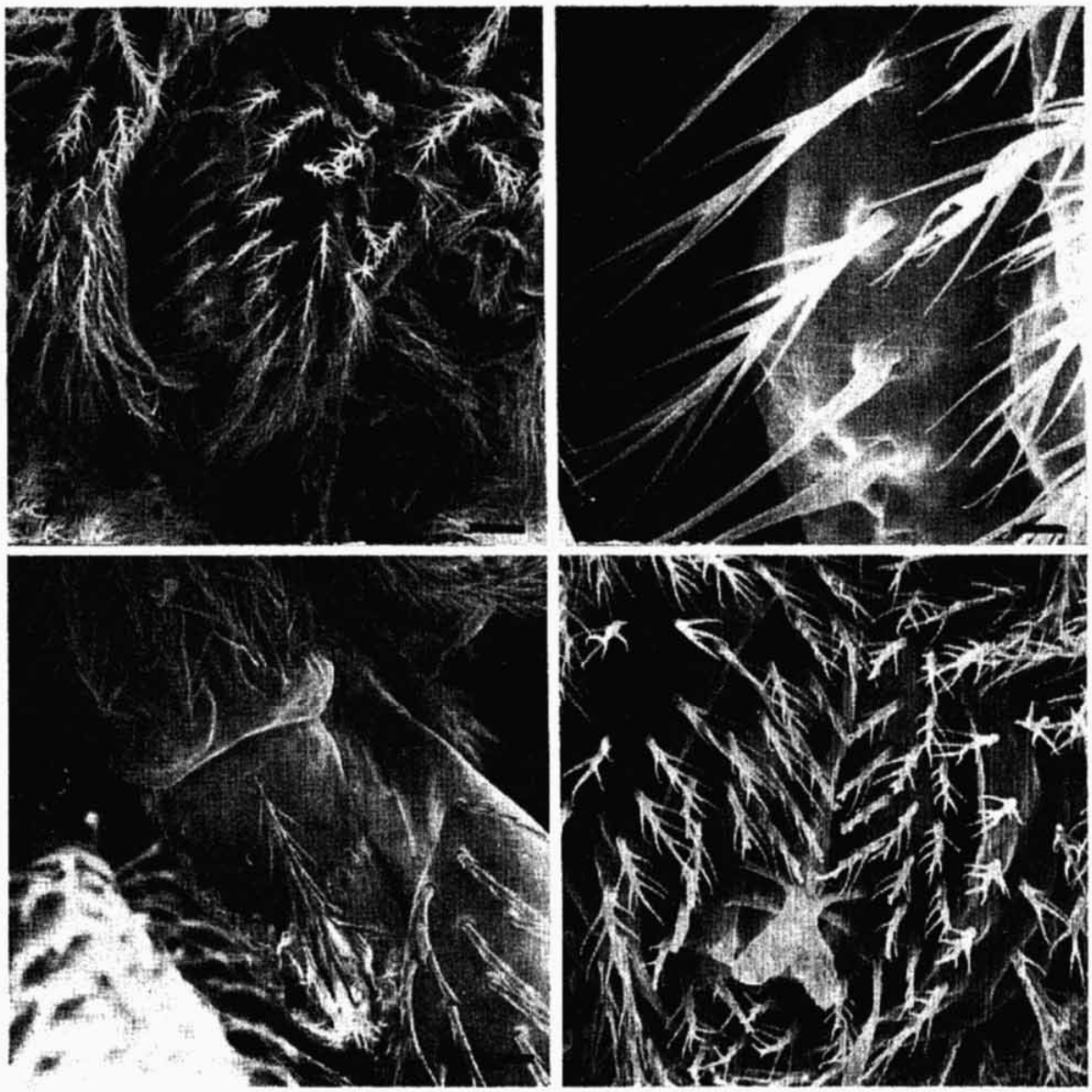

Fig. 1. *Neotrombicula zachvatkini*, female, genital aperture. (Scale = 19 μ.)

Fig. 2. *Neotrombicula zachvatkini*, detail of female genital setae. (Scale = 4.7 μ.)

Fig. 3. *Neotrombicula zachvatkini*, adult, tectum (epistome) and proximal part of crista metopica. (Scale = 17 μ.)

Fig. 4. *Neotrombicula zachvatkini*, male, genital aperture. (Scale = 10 μ.)

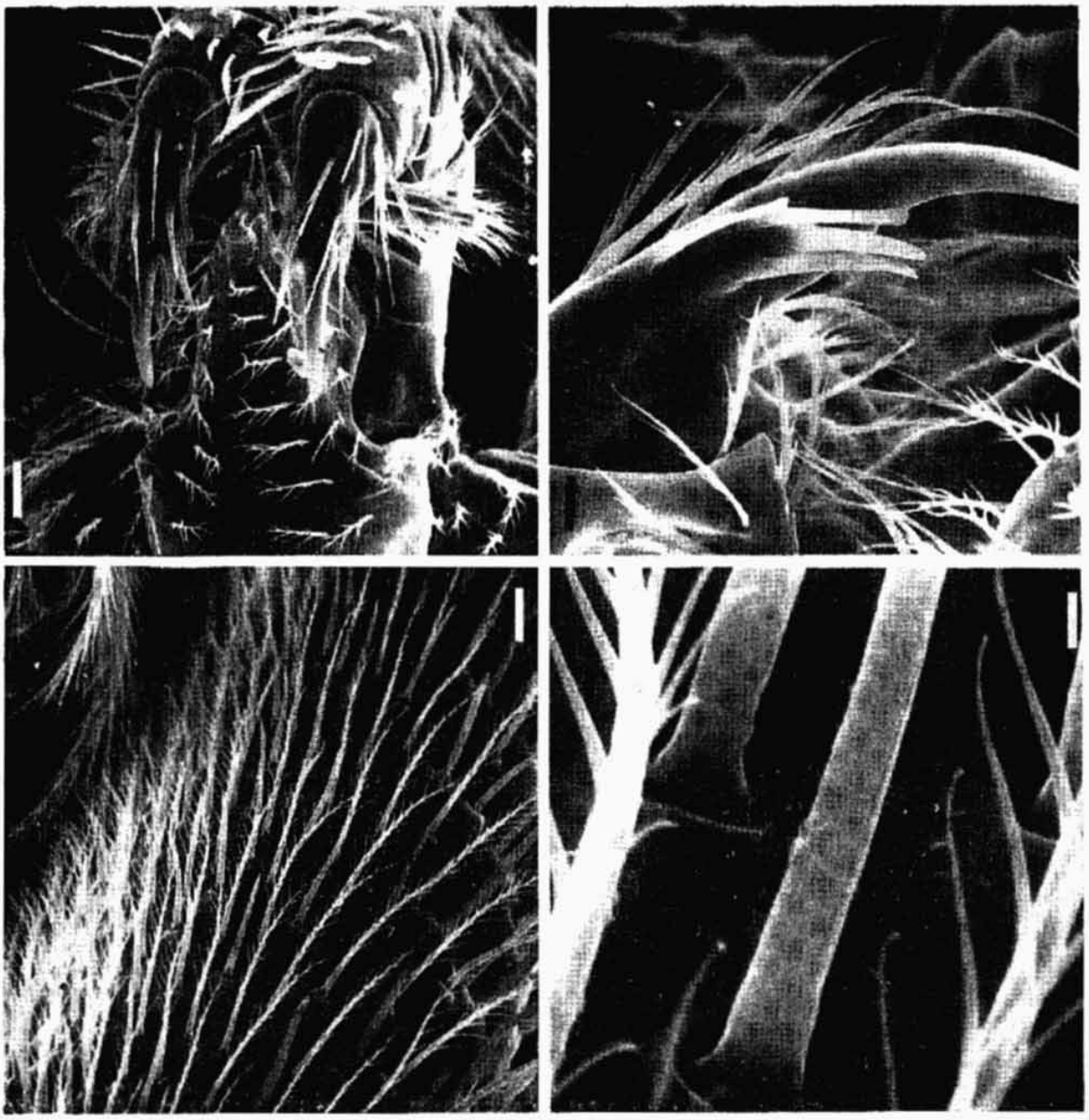

Fig. 1. *Neotrombicula zachvatkini*, adult, ventral part of gnathosoma (hypostome and palps). (Scale = 19 μ.)

Fig. 2. *Neotrombicula zachvatkini*, adult, detail of palptibia — inner lateral side. (Scale 10 μ.)

Fig. 3. *Neotrombicula zachvatkini*, adult, detail of chaetotaxy of tarsus of the first pair of legs. (Scale = 9 μ.)

Fig. 4. *Neotrombicula zachvatkini*, adult, detail of the structure of solenidia on tarsus I. (Scale = 0.9 μ.)

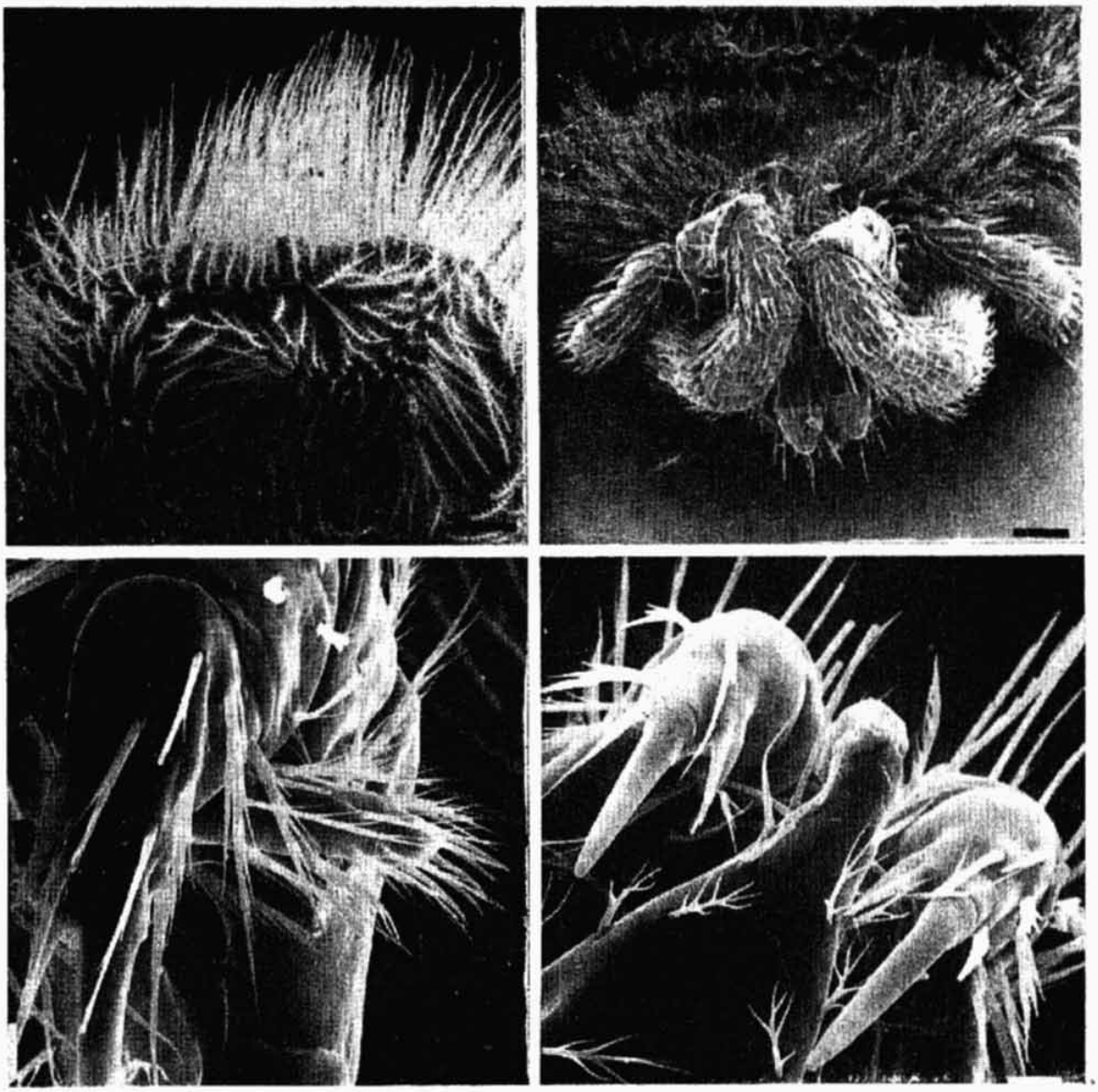

Fig. 1. *Neotrombicula zachvatkini*, nymph, character of setation of posterior part of idiosoma. (Scale = = 50 μ.)

Fig. 2. *Neotrombicula zachvatkini*, nymph, dorsal side of propodosoma and gnathosoma. (Scale = 53 μ.)

Fig. 3. *Neotrombicula zachvatkini*, adult, tibia and tarsus of palp. (Scale = 10 μ.)

Fig. 4. *Neotrombicula zachvatkini*, nymph, hypostome and tibia of palp, ventral side. (Scale = 10 μ.)

R 9483

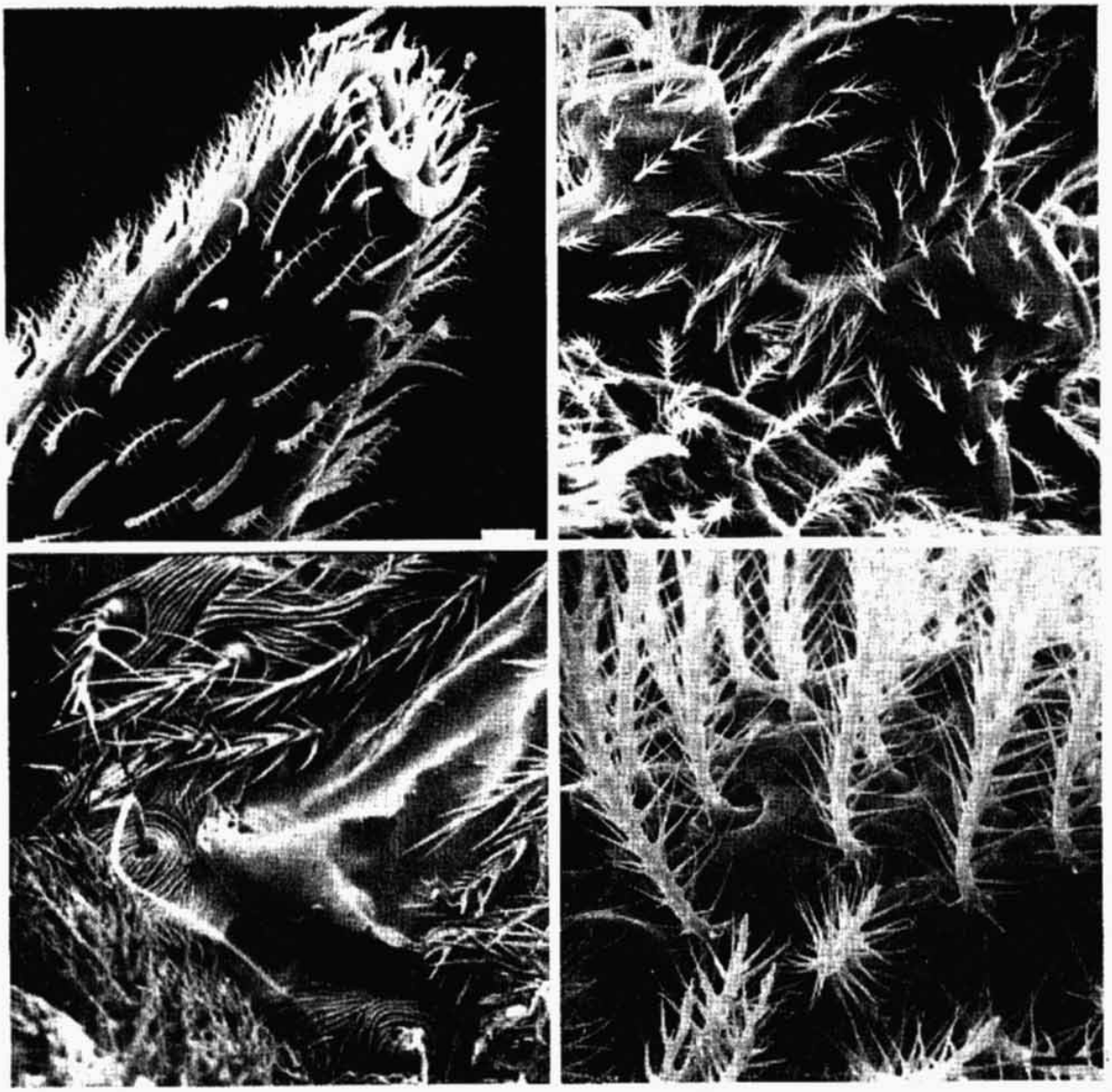

Fig. 1. *Neotrombicula zachvatkini*, nymph, tarsus of the first pair of legs (Scale = 10 μ.)

Fig. 2. *Neotrombicula zachvatkini*, nymph, ventral side of propodosoma (coxae I + II, hypostome). (Scale = 20 μ.)

Fig. 3. *Neotrombicula zachvatkini*, nymph, area sensilligera, posterior part of crista metopica, insertion of sensillae and paracristal setae. (Scale = 9 μ.)

Fig. 4. *Neotrombicula zachvatkini*, nymph, character of body setae and their insertion. (Scale = 10 μ.)

R 9321

First National Parasitological Conference in the Romanian Socialist Republic

Between October 5—6, 1972 the RSR Union of Medical Sciences Associations, with cooperation of Microbiological Society Parasitological Section held the First National Parasitological Conference in Bucharest attended by foreign guests from Bulgaria, Czechoslovakia, France, GDR, Great Britain, Iran, Poland, USSR and Yugoslavia. The first day was devoted to the problems of parasite-host relationships and two introductory papers were read: "Some aspects of parasite-host relationships", "Nutrition and parasite-host relationships". Biology and ecology of parasites constituted the topic of the second day of the conference. The main paper dealt with some modern aspects of these problems.

A total of 147 papers were on the programme of the two-day conference but for obvious reasons only 66 were read, of which 16 covered protozoology, 34 helminthology, 12 arachnoentomology and 4 were concerned with medical mycology. The protozoological contributions dealt with problems of human intestinal protozoiases, lambliasis, amoebiasis, toxoplasmosis, isosporosis, trichomoniasis, leishmaniasis, malaria, bovine borreliasis and gregarinosis in crustaceans. Helminthological papers were devoted to the relations between climatology and helminthiases; to human intestinal nematodiases, trichinellosis, hydatidosis, strongyloidosis; to host-parasite relationships, some immunological problems, chemoprophylaxis in helminthiases and various aspects in the studies on helminth fauna of domestic and wild animals. The communications covering arachnoentomology concerned the research of malarial mosquitoes and their control, application of insecticides against *Blattella germanica* and *Cimex lectularius*, resistance of laboratory colonies of *Musca domestica*, some problems of tick bionomy and parasite-host relationships in fleas and feather mites. Mycological papers dealt with the problems of dermatophytes and small mammals, histopathology of digestive mycoses, eye candidiasis and enzymatic activity in experimental poisoning with aflatoxin. Most papers were presented in Romanian, but simultaneous translations into Russian, French and English were provided. After the termination of the conference foreign participants had the possibility of visiting Parasitological Clinic in Bucharest and the Cantacuzino Institute, one of the leading Romanian medical institutes with a long parasitological tradition.

The conference offered the opportunity of getting acquainted with a wide range of parasitological research carried out by the Romanian scientists primarily medical and veterinary workers active in institutes and health service in the capital, provincial towns, as well as field stations. On the other hand, 14 papers delivered by foreign participants, out of which two were from Czechoslovakia, informed the Romanian colleagues of the problems studied in similar institutions of other countries. The meeting, which took place in a friendly and cordial atmosphere, created good prerequisites for organizing similar conferences in the future.

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